## Attempt all questions.

1 The population of a town was decreasing every year due to migration, poverty and unemployment. The present population of the town is $6,31,680$. Last year the migration was $4 \%$ and the year before last, it was $6 \%$. What was the population two years ago?
a) $6,00,000$
b) $7,00,000$
c) $9,00,000$
d) $5,00,000$

2 Find C.I. on Rs 15,500 for 2 years at $15 \%$ per annum compounded annually.
a) ₹ $4,998.75$
b) $₹ 4,500$
c) ₹ 5,000
d) None of these

3 If a \%is the discount per cent on marked price x , then discount is
a) $x \times \frac{a}{100}$
b) $\frac{a}{x} \times 100$
c) $\frac{x}{a} \times 100$
d) $\frac{100}{x a}$

4 Find C.I. on Rs 13,500 for 2 years at $10 \%$ per annum compounded annually.
a) ₹ 2,900
b) ₹ 3,000
c) ₹ 2,835
d) ₹ 2,500

5 If 8\% VAT is included in the prices, find the original price of a TV bought for Rs 13,500.
a) ₹ 14,000
b) ₹ 12,500
c) ₹ 12,000
d) None of these

6 The marked price of an article is $10 \%$ higher than the cost price. A discount of $10 \%$ is given on the marked price. In this kind of sale, the seller
a) gains $1 \%$
b) loses $10 \%$
c) loses $1 \%$
d) bears no loss, no gain

7 A T.V. worth₹ 7200 is offered for sale at ₹ 4800 . What percent discount is offered during the sale?
a) $\left(\frac{98}{3}\right) \%$
b) $\left(\frac{77}{3}\right) \%$
c) $\left(\frac{100}{3}\right) \%$
d) $\left(\frac{46}{3}\right) \%$ .
[1]
a) 24
b) 15
c) 60
d) 5

9 The price of an article diminished twice successively, first by $30 \%$ and then by $40 \%$. If the original price was₹ 1000 , what is it now?
a) ₹ 300
b) ₹ 400
c) ₹ 240
d) ₹ 420

10 A shirt with marked price Rs 800 was sold at Rs 680 . The rate of discount allowed on the shirt is
a) $25 \%$
b) $20 \%$
c) $10 \%$
d) $15 \%$

11 A toy is purchased at₹ 1320 including $5 \%$ SGST and 5\% CGST. The actual price of the toy without GST is
a) ₹ 1400
b) ₹ 1150
c) ₹ 1300
d) ₹ 1200

12 A TV was bought at a price of Rs 21,000. After one year the value of the TV was depreciated by5\% (Depreciation means a reduction of value due to use and age of the item). Find the value of the TV after one year.
a) ₹ 19,000
b) ₹ 18,950
c) ₹ 19,950
d) None of these

13 The population of a city is 155625 , for every 1000 men, there are 1075 women. If $40 \%$ of men and $24 \%$ of women be literate, then what is the percentage of literate people in the city?
a) $30 \%$
b) $32 \%$
c) $32 \frac{10}{15} \%$
d) $31 \frac{59}{83} \%$

14 A football team won 10matches out of the total number of matches they played. If their win percentage was $40 \%$, then how many matches did they play in all?
a) 26
b) 30
c) 25
d) 20

15 A shopkeeper's price is $50 \%$ above the cost price. If he allows his customer a discount of $30 \%$ what profit does he make?
a) $10 \%$
b) $20 \%$
c) $5 \%$
d) $15 \%$

16 Population of a town increases at a certain rate per cent per annum. Present population of the town is 3600 and in 5 years' time it becomes 4800 . How much will it be in 10 years time?
a) 7000
b) 6400
c) 6000
d) 5000

17 An item marked at Rs 540 is sold for Rs 500 . What is the discount amount?
a) Rs 50
b) Rs 40
c) Rs 30
d) None of these

18 A cycle shop allows a discount of $25 \%$ on the marked price and earns a profit of $20 \%$ on the cost price. Its marked price on which shop earns $₹ 40$ is
a) ₹ 300
b) ₹ 340
c) ₹ 320
d) ₹ 280

19 If a shirt cost₹ 64 after a $20 \%$ discount, what was its original price?
a) ₹ 76.80
b) ₹ 86.80
c) ₹ 88
d) ₹ 80

20 A sum of money placed at compound interest doubles itself in 4 years. In how many years will it amount to eight times itself?
a) 14 yrs
b) 12 yrs
c) 16 yrs
d) 18 yrs

21 The product of $\frac{2}{3} x y$ by $\frac{3}{2} x z$ is:
a) $\frac{1}{6} x y z$
b) $6 x^{2} y z$
c) $x^{2} y z$
d) None of these
$x(x-3)+2=?$
[1]
a) $x^{2}-3 x+2$
b) $x^{2}-2 x+2$
c) $x^{2}-5 x+3$
d) $x^{2}+3 x+5$

23 Using the suitable Identity find $(2 x+3 y)^{2}$.
[1]
a) $16 x^{2}+12 x y+9 y^{2}$
b) $4 x^{2}+12 \mathrm{xy}+16 y^{2}$
c) $12 x y$
d) $4 x^{2}+12 x y+9 y^{2}$
$24 \quad 5 \mathrm{x} \times 4 \mathrm{x}^{2}=$ ?
[1]
a) $20 x^{3}$
b) $20 x^{2}$
c) $20 x$
d) 20

25 By using identity find $(a+1)(a+2)=$ ?
a) $a^{2}+5 a+2$
b) $a^{2}+3 a+5$
c) $a^{2}+3 a+2$
d) $3 a+2$

26 Find the product of $\left(x^{2}+x+1\right)$ and $\left(x^{2}-x+1\right)$.
a) $x^{4}+x^{2}+1$
b) $x^{4}-x^{2}-1$
c) $x^{4}+x^{2}-1$
d) $x^{4}-x^{2}+1$

27 The volume of a cuboid of dimensions $a, b, c$ is
a) abc
b) $a^{2} b^{2} c^{2}$
c) $a^{3} b^{3} c^{3}$
d) none of these

28 Subtract: $3 a-3 b+c$ from $4 a+5 b-3 c$
a) $a+8 b-4$
b) $-5 x^{2}+5 x+5$
c) $2 a+3 b+c$
d) $a+2 b+3 c$

29 Evaluate: $(1-6 x)(1+6 x)+(2+x)(2-x)$
a) $5+37 x^{2}$
b) $5-37 x^{2}$
c) $6 x+7 x^{2}$
d) $37+5 x$

30 Volume of a rectangular box (cuboid) with length $=2 \mathrm{ab}$, breadth $=3 \mathrm{ac}$ and height $=2 \mathrm{ac}$ is
a) $12 a^{2} \mathrm{bc}$
b) $2 \mathrm{ab}+3 \mathrm{ac}+2 \mathrm{ac}$
c) $12 \mathrm{a}^{3} \mathrm{bc}^{2}$
d) $12 \mathrm{a}^{3} \mathrm{bc}$

31 Simplify: $(3 a-4 b)\left(9 a^{2}+12 a b+16 b^{2}\right)+(4 a-3 b)\left(16 a^{2}+12 a b+9 b^{2}\right)$
a) 1
b) $91 a^{3}+91 b^{3}$
c) 0
d) $91 a^{3}-91 b^{3}$

32 What must be subtracted from $3 x^{2}+4 y^{2}-5$ to get $2 x^{2}-3 y^{2}+5$ ?
a) $x^{2}+7 y^{2}-10$
b) $x^{2}-7 y^{2}-10$
c) $x^{2}+3 y^{2}+5$
d) $x^{2}-4 y^{2}+5$

33 The sum of - 7 pq and 2 pq is:
a) 5 pq
b) -9 pq
c) 9 pq
d) -5 pq

34 On dividing $57 \mathrm{p}^{2}$ qr by 114 pq , we get
a) $\frac{1}{4} p r$
b) $\frac{3}{4} p r$
c) $\frac{1}{2} p r$
d) 2 pr

Subtract 3pq $(p-q)$ from $2 p q(p+q)$.
a) 5 pq
b) $5 \mathrm{pq}^{2}$
c) $-\mathrm{p}^{2} \mathrm{q}+5 \mathrm{pq}{ }^{2}$
d) $-p^{2} q$

The height of a triangle is $x^{4}+y^{4}$ and its base is $14 x y$. Find the area of the triangle.
a) $7 x\left(x^{3}+y^{3}\right)$
b) $7 x y\left(x^{4}+y^{4}\right)$
c) $x y\left(7 x^{4}+y^{4}\right)$
d) $7 x^{4}+7 y^{4}$

37 Find the product of $3 a^{2}-4 a x+x^{2}$ by $5 x^{2}-2 a x$
a) $14 a^{3} x+23 a^{2} x^{2}-22 a x^{3}+5 x^{4}$
b) $16 a^{3} x+25 a^{2} x^{2}-22 x^{3}+5 x^{4}$
c) $-6 a^{3} x+23 a^{2} x^{2}-22 a x^{3}+5 x^{4}$
d) $14 a^{2} x+23 a^{3} x^{2}-22 a x^{3}+5 x^{4}$

Puberty ends when an adolescent reaches:
a) Reproductive maturity
b) Physical growth
c) Maximum height
d) Mental growth

Walking and playing in fresh air keeps the body
a) All of these
b) Smelly and unhygienic
c) Attractive and beautiful
d) Fit and healthy

43 The hormone produced by pancreas is
a) insulin
b) adrenaline
c) estrogen
d) testosterone

In the male human, sperm contains 22 pairs of autosomes and
a) A pair X - chromosome
b) One Y - chromosome
c) A pair ofY - chromosome
d) Three X - chromosome

Sex hormones are released by:
a) Testes only
b) Ovaries and adrenal gland
c) Testes and pituitary gland
d) Testes and ovaries

First menstrual flow is called $\qquad$ .
a) Menopause
b) Menarche
c) Menstruation
d) Ministration

Which of the following disease is sexually transmitted?
a) Common cold
b) AIDS
c) Tuberculosis
d) Pneumonia

Which of the following contain iron rich food?
a) Polished rice
b) Leafy vegetable
c) Potato
d) Brinjal

Which of the following is a exocrine gland?
a) Adrenal
b) Salivary gland
c) Pancreas
d) Pituitary

Which hormone controls metamorphosis in frogs?
a) Thyroxin
b) Insulin
c) Adrenal
d) Growth hormone

Which of the following minerals is an essential constituent of hemoglobin of blood?
a) Calcium
b) Iodine
c) Iron
d) Magnesium

AIDS is caused by dangerous virus called $\qquad$ .
a) Rhesus
b) T- virus
c) Bacteriophage
d) HIV

The release of egg from ovum is described as
a) Ovulation
b) Insemination
c) Reproduction
d) Menstruation

Deficiency of thyroxin in the body causes
a) salt imbalance
b) dwarfism
c) diabetes
d) goitre

We should not use drugs as they are $\qquad$ .
a) Banned by government
b) Addictive
c) Very costly
d) Not available easily

What will happen if the thyroid is removed from a tadpole?
a) The tadpole will grow into a dwarf frog
b) The larva will die
c) It will continue in larval stage
d) The larva will produce a giant frog

7 It is misconception that:
a) Male is responsible for the sex of the child
b) Sex is determined by vigor of male
c) Women are responsible for sex of child
d) Sex is determined by choice

Which one of the following is correctly matched?
i)Adrenaline - Growth hormone
ii)Insulin - Female hormone
iii)Oestrogen - Stress reliever hormone
iv)Testosterone - Male hormone
a) option (ii)
b) option (iv)
c) option (i)
d) option (iii)

59 Reproduction is essential life processes which help in
a) Remain alive
b) Change in habitat
c) Continuity of race
d) Change in size

60 Initially girls grow faster than boys. At what age both reaches to their maximum height?
a) 13 years
b) 12 years
c) 18 years
d) 15 years

61 Same force produces more pressure on
a) Circular area
b) Larger area
c) Smaller area
d) Equal area

Which force is responsible for the stability of our universe?
a) Magnetic force of earth
b) Frictional force between planets and atmosphere
c) The force of gravitation
d) Magnetic force of Sun

63 Pressure exerted by water at the bottom of the container depends on the
a) Size of the column
b) All of these
c) Mass of the column
d) Height of the column

64 The pressure on earth will be less when the manis
a) standing by one foot
b) lying
c) standing by two feet
d) sitting

65 Which among the following will exert maximum pressure when pushed with the same amount of force?
(a) An eraser of area $2 \mathrm{~cm}^{2}$
(b) A sharpened pencil tip
(c) The blunt end of a pencil
(d) The rear portion of a closed safety pin

66 Pressure is
a) Inversely proportional to force
b) Directly proportional to mass
c) Inversely proportion to area of contact
d) Directly proportional to area of contact

The pressure inside our body is
a) Less than atmospheric pressure
b) More than atmospheric pressure
c) Equal to the atmospheric pressure
d) Absent

68 It is easy to walk on sand with flat shoes because
a) Flat shoes are sand resistant
b) Flat shoes are made of plastic
c) Flat shoes are lighter
d) Flat shoes have larger surface area

69 Consider a porter standing on a platform with a suitcase which presses his head with a force of 300 N . The reaction forces is exerted by
a) the head on the suitcase
b) the earth on the suitcase
c) the earth on the porter
d) the suitcase on the earth

The pressure in the bottle filled with water is maximum
a) at the top of the bottle
b) in the middle of bottle
c) in the bottom of the bottle
d) first at the top then in the middle

71 A body will remain in state of motion on rolling on ground if
a) Friction is very large
b) Friction is absent
c) All of the above
d) Friction is acting on same direction

72 During dry weather, while combing hair, sometimes we experience hair flying apart. The force responsible for this is
a) Force of friction
b) Electrostatic force
c) Force of gravity
d) Magnetic force

73 The lateral pressure exerted by liquid at same height is
a) Less in right direction
b) Equal in all direction
c) More in left direction
d) Not equal in all direction

74 While walking on the ground we apply force on
a) friction
b) ground
c) gravitational
d) shoes

If no force acts on a body, it will
a) shape gets deformed
b) stop moving
c) either in rest or in motion
d) move fastly

If the force applied on a moving body in direction of motion than
a) Mass of the body increases
b) Speed of the body increases
c) Speed of body decreases
d) Mass of the body decreases
S.I. unit of pressure is
a) Kelvin
b) Celsius
c) Newton
d) Pascal

Two objects repel each other. This repulsion could be due to
a) magnetic force only
b) electrostatic force only
c) either a magnetic or an electrostatic force
d) frictional force only

79 Two forces each of 20 N act simultaneously on a body, the maximum net force and minimum net force are
(a) 40 N and 0
b) 20 N and 10 N
c) 20 N and 0
d) 40 N and 20 N
80. Kicking a ball with our legs is an example of force of
a) gravitation
b) muscular
c) friction
d)magnetic [1]

The revolt of 1857 began from:
a) Lucknow
b) Meerut
c) Kanpur
d) Awadh

82 Which one of the following is considered as an immediate cause of the great revolt of 1857 ?
a) Annexation of Jhansi, Nagpur, Satara, etc under Doctrine of Lapse.
b) Hindu sentiments were hurt by the abolition of certain social practices, like Sati.
c) Issue of the cartridges (suspected of being coated with the fat of cows and pigs) used in the new Enfield rifle introduced by the British.
d) The livelihood of Indian artisans and craftsmen were affected as cheap machine - made goods were available.

83 Name the Indian soldier who tried to rebel against the British at Barrackpore, but was arrested and hanged to death on 8th April 1857.
a) Tantia Tope
b) Mangal Pandey
c) Nana Saheb
d) Bahadur Shah Zafar

84 By the mid 18th century, what actually happened to the Nawabs and Rajas in India?
D. Many Nawabs and Rajas were dead after a major war with the British.
a) Only D
b) Only C
c) Only A
d) Only B

85
Who took over the administration in 1858 from the East India Company?
a) Queen Victoria
b) Queen Elizabeth
c) King George V
d) King Edward

Which one from the following options refers to the term Firangis?
a) Residents of India
b) Foreigners
c) Landlords
d) Money lenders

Who led the revolt in Kanpur?
a) Mangal Pandey
b) Nana Saheb
c) Bahadur Shah Zafar
d) Begum Hazrat Mahal

88 Name the able commander in chief of Nana Saheb who led the revolt in Kanpur.
[1]
a) Maulvi Ahmadullah
b) Tantia Tope
c) Bahadur Shah Zafar
d) Mangal Pandey

89 From the names given below, which one is not called as an alternative to The Great Revolt of 1857.
a) Uprising of 1857
b) Indian Mutiny
c) Sepoy Mutiny
d) Second War of Independence

What was the new title given to the Governor - General?
a) President
b) Secretary - General
c) Resident
d) Viceroy

The British regained control of the country in the year $\qquad$ -.
a) 1859
b) 1860
c) 1858
d) 1857

Mangal Pandey, a young soldier, was hanged to death for:
a) attacking English factories
b) killing an Englishman
c) attacking his officers in Barrack pore
d) telling lies

The new law passed in 1850 made:
a) conversion into Christianity easier
b) people of India Christians
c) the life of the Indians difficult
d) none of these

94 Among the following Residents of British India, who was forced to take refuge in a residency and killed by the forces of Begum Hazrat Mahal?
a) John Nicholson
b) John Lawrence
c) Henry Havelock
d) Sir Henry Lawrence

Breeding of fish in specially constructed tanks and ponds is known as:
a) Horticulture
b) Sericulture
c) Agriculture
d) Pisciculture

96 The main motive of this type of cultivation is profit. A large area of land and a huge amount of capital is used for cultivation with the latest technological advancement. Name the type of farming from the given list.
a) Nomadic farming
b) Shifting Cultivation
c) Commercial Farming
d) Subsistence Farming

What is the breeding of fish?
a) Agriculture
b) Sericulture
c) Viticulture
d) Pisciculture

Horticulture means
a) Primitive farming
b) Growing of wheat
c) Growing vegetables, flowers and fruits for commercial use
d) None of these

The major raw material for the textile industry, India is a leading producer of this crop. Requires high temperature, light rainfall, two hundred and ten frost free days, and bright sunshine for its growth, this grows best on black and alluvial soil. Name the crop.
a) Coffee
b) Rice
c) Millets
d) Cotton

100 Which is true regarding shifting cultivation:
a) The land retains its fertility
b) The cultivator own the plot and stays there
c) It is also known as 'slash and burn' agriculture
d) It is a modern subsistence agriculture

101 From the given options, which one is the appropriate definition for the term Agriculture?
A. The Process of preparing the land for the cultivation of crops, and also to rear livestock.
B. The size of landholdings in an area.
C. The temperature and the amount of rainfall required for certain crops to grow.
D. The extraction and production of resources by nature.
a) Only A
b) Only D
c) Only C
d) Only B

Name the type of economic activities.
a) Primary, Secondary, and Tertiary
b) Primary and Secondary
c) Secondary and Tertiary
d) Primary and Tertiary

103 A few conditions with respect to the growth of Tea are given below. Pick out the one that is apt to Coffee.
a) Requires a warm and wet climate and well - drained loamy soil
b) Requires cool climate
c) Labour in large number is required to pick the leaves
d) Needs well - drained loamy soils and gentle slopes

104 Name the type of activity that includes all those connected with the extraction and production of natural resources.
a) Primary
b) Livelihood
c) Secondary
d) Tertiary

105 Which amongthe following are fibre crops?
a) Millets and Maize
b) Jute and Cotton
c) Tea and Coffee
d) Rice and Wheat

106 Name the crop that is also known as Paddy?
a) Rice
b) Millets
c) Maize
d) Wheat

107 In what season is wheat grown in India?
a) Summer
b) Autumn
c) Winter
d) Monsoon

108 From the following list of inputs, mention the one that is not a natural input in the agriculture system.
a) Fertile soil
b) Sunshine
c) Pesticides
d) Earthworms which loosen the soil

109 A stated course of action that provides direction for the future, sets goals to be achieved or lays out principles or guidelines to be followed and acted upon.
a) Budget
b) Programme
c) Strategy
d) Policy

110 Niyamgiri is a sacred mountain of:
a) Adivasis
b) Both Adivasis and Religious people
c) Religious people
d) None of these
$\qquad$ are needed to protect minor Communities against the possibility of cultural dominance.
a) Safeguards
b) Legal rights
c) Laws
d) None of these

112 How many different Adivasi groups are there in India?
a) 300 (approx)
b) 600 (approx)
c) 400 (approx)
d) 500 (approx)

113 According to the literacy rate by religion, 2001 how many percents of the population is literate?
a) $65 \%$
b) $100 \%$
c) $95 \%$
d) $80 \%$

114 In which one of the following states we don't find Adivasis?
a) Madhya Pradesh
b) Gujarat
c) Kerala
d) Orissa

115 Adivasis the term literally means:
a) Rich inhabitants
b) North inhabitants
c) Original inhabitants
d) Desi inhabitants

116 $\qquad$ is a part of a city in which members of a minority group live, especially because of social, legal, or economic pressure.
a) Gheno
b) Ghekto
c) Ghetto
d) Gheto

117 In a social environment, Marginalisation is due to:
a) Different Language
b) Different Religion
c) Minority
d) All of these

118 What is meant by Malnourishment?
a) Person gets a balance diet
b) Person gets the extra diet
c) Person does not get adequate food
d) None of these

119 Adivasis have always been influenced by different surrounding religions like
a) Shakta, Sikhs, Muslims, Polish and Christianity
b) Shakta, Buddhist, Vaishnav, Bhakti and Christianity
c) Shakta, Sikhs, Muslims, Jains and Christianity
d) Shakta, Buddhist, Muslims, Italian and Christianity

120 What is the other name of Adivasis?
a) None of these
b) Poor
c) Tribals
d) Educated person

